

**REMARKS**

Claims 1-35 are in the application. By this amendment, claims 26 and 27 are amended. Claims 33-35 have been added. Claims 28-32 stand allowed. Claims 3, 4, 6-13, 16, and 22-27 have been objected to by the Examiner as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including any intervening limitations.

Claims 18, 26 and 27 have been objected to because of the following informalities. The Examiner states that claim 18 indicates that the quantity of condensed water placed back into the aquifer is greater than the quantity of water removed. The Examiner states "this is not understood. How can one continue to place more water into than what is removed from the aquifer without causing saturation or flooding". The answer here is simply that the aquifer may have been drawn down to a less than full state, and by adding more condensed atmospheric water than is withdrawn, the aquifer may be recharged even though water is steadily being withdrawn from the aquifer. Thus, the amount of water within the aquifer may be increased without necessarily causing saturation or flooding. Claims 26 and 27 have been amended to comply with the Examiner's requirement regarding corrections.

Claims 1-2, 4, 14, 15, and 17-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 11-229450 in view of Vetrovec et al. (2005/0044862) or Radermacher et al. (2004/0244398). The Examiner states that the Japanese patent teaches to withdraw water from an aquifer and also to reinject water into the aquifer to replace the withdrawn water. The Examiner asserts that the Japanese patent teaches all of the claimed limitations except for getting the water to be reinjected from condensing water from the atmosphere. For this, the Examiner looks to Vetrovec, which teaches condensing water from the atmosphere and then injecting that water into the soil to water plants. The Examiner asserts that Radermacher teaches condensing water from the atmosphere of spring water quality and

using the water. He argues that it would have been obvious to one in ordinary skill in the art to produce the water reinjected in the Japanese patent from condensed water as taught by Radermacher or Vetrovec, because the reinjected water could be obtained from any known water source and condensed water is a known water source.

As to claim 2, the Examiner asserts that the water injected down well 1 is close to the water extraction well 21 in the Japanese patent. As to claim 5, Examiner states that a portion of well, well 21 is cased. As to claims 14, 15, and 21, the Examiner asserts that the withdrawn water is from a drilled well, 21. As to claims 17-19, dealing with the exact amount of water placed back into the well Examiner asserts, would have been considered an obvious design choice that can be arrived at by routine experimentation. As to claim 20, the Examiner asserts that well 1 of the Japanese patent is an injection structure and well 21 is an extraction structure. Applicant respectfully traverses the rejection of claims 1-2, 4, 14, 15, and 17-21 and requests that each of these claims be reconsidered in view of the following remarks and passed to issue over the Examiner's rejection.

Although the Japanese patent apparently shows the addition of water to an aquifer from which water is being withdrawn, it is not clear why this is being done. Applicant notes that the extraction well is down slope from the point at which water is being injected, and one is left to wonder if the Japanese patent teaches anything more than a crude means of transferring water from one point to another. What is clear, however, is that the Examiner is correct insofar that the Japanese patent teaches nothing regarding recharging an aquifer using condensed atmospheric water. Moreover, neither the Japanese patent, nor Vetrovec, nor Radermacher, whether taken singly, or in combination of each other, either teaches or suggest Applicant's claimed invention.

Vetrovec and Radermacher teach the condensing of water from the atmosphere followed by use of the condensed water, either for watering a plant, or for human consumption. In contrast, in Applicant's claimed invention, the condensed water is not used for human

consumption and it is not used to water plants. Moreover, it is not used directly in any manner according to the claimed method and system. Rather, condensed atmospheric water is provided to an aquifer or surface body of water to replace that which has been withdrawn. The suggestion that the combination of the Japanese patent with either Vetrovec or Radermacher comprises a colorable basis upon which to reject Applicant's claims is sustainable only as an exercise of hindsight reconstruction of Applicant's invention.

The Examiner and the Applicant both understand that the prior art is replete with devices which condense atmospheric water. Such devices, however, use or consume the atmospheric water directly. Applicant, as stated above, does not use the water directly but rather uses it to avoid a problem with an aquifer being depleted. This is significant, because Applicant's method and system allow periodic high volume-extraction of water, provided that the time-integrated amount of atmospheric water injected into the aquifer is sufficient to avoid a depletion issue. As such, Applicant patentably defines over all prior art of record and each of the claims in this case, including new claims 33-35, which are directed to the extraction of water from a surface water body and for recharging the source water body from which the surface water has been extracted, are all allowable over the prior art of record and should be passed to issue. Such action is earnestly solicited.

Each of the new claims 33-35 makes clear that the condensed water is not used directly, but is rather used to recharge an aquifer. In essence, the extraction of water and replenishment with atmospheric condensed water are decoupled in Applicant's claimed method and system. This is not shown in the prior art of record, and these claims, too, are therefore allowable.

Respectfully submitted,

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